AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

1. **(Currently amended)** A transmission system comprising first and second rotatable shafts, said first shaft having a longitudinal axis, and means for transferring drive from one of the shafts to the other shaft comprising first and second gear wheels each rotatably mounted on the first shaft and having drive formations formed thereon, a selector assembly for selectively transmitting torque between the first shaft and the first gear wheel and between the first shaft and the second gear wheel, wherein the selector assembly comprises an actuator assembly and first and second sets of engagement members, wherein each engagement member includes a first engagement face for engaging the first gear wheel, ~~and~~ a second engagement face for engaging the second gear wheel, and a body that is substantially rigid such that the first and second engagement faces are arranged in a fixed relationship to one another, said actuator assembly including a shift fork assembly arranged to move each of the first and second sets of engagement members in first and second directions along the longitudinal axis of the first shaft into and out of engagement with the first and second gear wheels independently of each other, the arrangement being such that when one of the first and second gear wheels is selected by the first and second sets of engagement members backlash between the first and second sets of engagement members and the drive formations when moving between acceleration and deceleration is less than or equal to four degrees, and the transmission being further arranged such that when the first gear is selected by the first and second sets of engagement members and a driving force is transmitted the second set of engagement members drivingly engages the selected first gear wheel, and the first set of engagement members is then in an unloaded condition, wherein the shift fork assembly is arranged to move the unloaded first set of engagement members into driving engagement with the second gear wheel to effect a gear change.

2. **(Previously Presented)** A transmission system according to claim 1, wherein the selector assembly is arranged such that when the first gear wheel is engaged by the first and second sets of engagement members and a braking force is transmitted the first set of engagement members drivingly engages the engaged gear wheel, and the second set of

engagement members is in an unloaded condition, and when a driving force is transmitted the second set of engagement members drivingly engages the engaged gear wheel, and the first set of engagement members is then in an unloaded condition.

3. **(Previously Presented)** A transmission system according to claim 1, wherein the actuator assembly is arranged to bias the loaded set of engagement members towards the unengaged gear wheel without disengaging the loaded set of engagement members from the engaged gear wheel.

4. **(Previously Presented)** A transmission system according to claim 1, wherein the first and second sets of engagement members are arranged to rotate, in use, with the first shaft.

5. **(Previously Presented)** A transmission system according to claim 1, wherein the first shaft is an input shaft and the second shaft is an output shaft and drive is transferred from the input shaft to the output shaft.

6. **(Canceled)**

7. **(Currently Amended)** A transmission system according to claim 1, wherein the drive formations on the first and second gear wheels comprise [[a]] first and second groups of dogs respectively.

8. **(Previously Presented)** A transmission system according to claim 7, wherein the first and second groups of dogs each comprise between two and eight dogs, evenly distributed on the first and second gears respectively.

9. **(Previously Presented)** A transmission system according to claim 8, wherein the first and second groups of dogs each comprise between two and four dogs, and preferably three dogs.

10. **(Previously Presented)** A transmission system according to claim 1, wherein the first and second sets of engagement members comprise between two and eight members.

11. **(Previously Presented)** A transmission system according to claim 10, wherein the first and second sets of engagement members comprise between two and four members, and preferably three members.

12. **(Previously Presented)** A transmission system according to claim 1, wherein the first shaft comprises keyways arranged such that the first and second sets of engagement members can slide axially along the keyways and to radially restrain the positions of the sets of engagement members.

13. (**Previously Presented**) A transmission system according to claim 12, wherein a cross-section of the keyways is one of T-shaped, slotted, and dovetailed.

14. (**Previously Presented**) A transmission system according to claim 35, wherein the actuator assembly comprises at least one resiliently deformable means for connecting a shift fork to at least one of the first and second sets of engagement members, said at least one resiliently deformable means being arranged to move at least one of the first and second sets of engagement members into engagement with the first and second gear wheels in response to movement of the shift fork.

15. (**Previously Presented**) A transmission system according to claim 14, wherein the at least one resiliently deformable means is arranged to bias at least one of the first and second sets of engagement members towards the first or second gear wheel when the engagement members are drivingly engaged with a gear wheel.

16. (**Previously Presented**) A transmission system according to claim 14, wherein the actuator assembly comprises first and second resiliently deformable means connected to the first and second sets of engagement members respectively and to the shift fork such that the first resiliently deformable means acts on the first set of engagement members and the shift fork, and the second resiliently deformable means acts on the second set of engagement members and the shift fork.

17. (**Previously Presented**) A transmission system according to claim 14, wherein the at least one resiliently deformable means is connected to the first and second sets of engagement members such that the resiliently deformable means acts on both the first and second sets of engagement members and the shift fork.

18. (**Previously Presented**) A transmission system according to claim 12, wherein members of the first and / or second sets of engagement members can perform limited axial movement relative to each other in the keyways.

19. (**Previously Presented**) A transmission system according to any one of claims 14-18, wherein the resiliently deformable means includes a spring.

20. (**Currently Amended**) A transmission system according to claim 19, wherein the ~~dise~~-spring comprises a disc spring having a plurality of arms, each arm having a first part that extends circumferentially around a portion of the disc spring and a second part that extends substantially radially inwards.

21. **(Canceled)**

22. **(Previously Presented)** A transmission system according to claim 1, wherein the drive formations are arranged such that they do not extend beyond the outside diameter of the gear wheels.

23. **(Previously Presented)** A transmission system according to claim 8, wherein the first and second groups of dogs each comprise three dogs.

24. **(Previously Presented)** A transmission system according to claim 10, wherein the first and second sets of engagement members comprise three members.

25. **(Previously Presented)** A transmission system according to claim 19, wherein the resiliently deformable means is a disc spring.

26-34. **(Canceled)**

35. **(Previously Presented)** A transmission system according to Claim 1, wherein the first and second engagement faces each have a retention angle in the range of 2.5 to 15 degrees.

36. **(Canceled)**

37. **(Previously Presented)** A transmission system according to claim 1, wherein the transmission system includes at least one further shaft.

38. **(Currently Amended)** A method for performing a decelerating downshift in a transmission system, said method including:

providing a transmission system having first and second rotatable shafts, said first shaft having a longitudinal axis;

providing first and second gear trains for transferring drive from one of the shafts to the other shaft, the first gear train including a first gear wheel rotatably mounted on the first shaft and the second gear train includes a second gear wheel rotatably mounted on the first shaft, said first and second gear wheels having drive formation formed thereon, and said second gear wheel being part of a higher gear than the first gear wheel;

selectively transmitting torque between the second gear wheel and the first shaft via a selector assembly including an actuator assembly having a shift fork assembly, and first and second sets of engagement members by

engaging the second gear wheel with the first set of engagement members such that each of the engagement members in the first set engages the second gear wheel with a first engagement face, and by

engaging the second gear wheel with the second set of engagement members such that each of the engagement members in the second set engages the second gear wheel with a first engagement face, and such that backlash between the first and second sets of engagement members and the drive formations when moving between acceleration and deceleration is less than or equal to four degrees, wherein each of the engagement members includes a body that is substantially rigid such that the first and second engagement faces are arranged in a fixed relationship to one another; and

starting from a position wherein the second set of engagement members drivingly engages the second gear wheel and the first set of engagement members is in an unloaded condition with respect to the second gear wheel, initially moving the unloaded first set of engagement members along the longitudinal axis of the first shaft by action of the fork assembly into engagement with the first gear wheel such that each of the engagement members in the first set engages the second gear wheel with a second engagement face, thereby transmitting torque between the first shaft and the first gear wheel to effect the gear change.

39. **(Previously Presented)** A method according to claim 38, including moving the second set of engagement members into engagement with the first gear wheel after the first set of engagement members engages the first gear wheel, such that each of the engagement members in the second set engages the second gear wheel with a second engagement face.

40. **(Previously Presented)** A method according to claim 38, wherein engaging the second gear wheel with the first and second sets of engagement members includes moving the first and second sets of engagement members in a first direction along the longitudinal axis of the first shaft into engagement with the second gear wheel by action of the shift fork assembly, and wherein moving the first set of engagement members into engagement with the first gear wheel includes moving the first set of engagement members in a second direction along the longitudinal axis of the first shaft into engagement with first gear wheel by action of the shift fork assembly.

41. **(Currently Amended)** A method according to claim 38, including providing [[a]]the transmission system with at least one further shaft.

42-45. **(Canceled)**

46. **(Currently Amended)** A method according to claim [[45]]38, wherein the shift fork assembly includes a shift fork and resilient means for connecting the first and second sets of

engagement members to the shift fork, including moving the first and second sets of engagement members via the resilient means when the shift fork is actuated.

47. **(Canceled)**

48. **(Currently Amended)** A method according to claim 46, including biasing the ~~first~~second set of engagement members towards the first gear wheel while it is drivingly engaged with the second gear.

49-50. **(Canceled)**